

## SOIL EROSION POTENTIAL IN WISCONSIN

Wisconsin's "soil erosion potential map" shows those areas with the greatest potential for soil loss and the greatest need for soil-conserving practices if the land is used to grow agricultural crops. The pattern of soils in much of Wisconsin is very complex; therefore the map is confined to showing only broad areas with potential for erosion. Within each of these broad delineations are many fields and farms with a mixture of less or more erosive areas.

The map does not distinguish areas that actually are eroding from those with potential for erosion. Included are areas that have been retained in native vegetation where erosion is not a problem until they are converted to more intensive agricultural use.

Soil erosion is influenced by climate, kind of soil, the slope the soil occurs on, and land use. The two most destructive forces of nature causing erosion in rural Wisconsin are wind and water.

Wind erosion (soil blowing) hazard is greatest during periods when a vegetative cover is not present on sandy and organic soils, and clayey soils that tend to granulate.

Water erosion can occur on all sloping soil and increases as the slope becomes steeper and the use becomes more intensive. The most intensive use is row crops. Less intensive uses, in descending order, include small grain, rotational hay and pasture, hayland, pasture, orchards, and forests.

The potential for erosion on cultivated soils can be reduced considerably by applying soil-conserving practices. Use of windbreaks, conservation tillage, cover crops, mulching, and stripcropping can reduce soil losses by wind. Conservation tillage, terraces, diversions, grassed waterways, mulching, contour farming, stripcropping, cover crops, and other practices can lower soil losses due to water erosion.

The soil erosion potential map indicates major areas where slight erosion (green) of less than 5 tons of soil per acre may be lost each year through farming operations.

Areas of moderate erosion (yellow) are where 5 to 10 tons of soil per acre may be lost each year through farming operations. The crosshatched areas are where wind erosion (soil blowing) is of greater significance than water erosion.

The red areas are where a severe erosion hazard exists and over 10 tons of soil per acre may be lost each year if the land is farmed without applying suitable soil-conserving practices.

Much of the farmland in Wisconsin that has an erosion potential is adequately protected by soil conserving practices. More of the land that is being farmed, however, is in need of soil-conserving practices.